

Claims

1. Method of operating a wind turbine including a generator (7) with a connected rotor (3) having a hub (4) and blades (5) rotatably connected to the hub (4) for adjusting the pitch angle **characterised in that** under climatic conditions, where there is a risk of icing on the blades (5) and no or weak wind, the generator (7) is used as a motor for driving the rotor (3), the rotational speed and pitch angle of the blades being adjusted such that icing occurs in areas of the blades, in particular in the leading edge area of the blades, where an ice abatement means is provided in form of a de-icing system or a surface structure or surface coating providing a water- and ice-repellent surface.
2. Method according to claim 1, wherein the rotational speed and the pitch angle of the blades are adjusted to allow the resulting wind to hit the leading edge (10) of the blades at an angle of incidence of between -30° and $+30^\circ$, preferably of between -12° and $+12^\circ$ along the majority of the length of the blades.
3. Method according to the claim 1 or 2, wherein the pitch angle of the blade is adjusted so as to minimise the power consumption used for rotating the rotor.

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4. Method according to any of the claims 1-3, wherein in the leading edge areas the blades are provided with a de-icing system being activated at intervals for removing the formed layers of ice.
- 25 5. Method according to claim 4, wherein the intervals between the activation of the de-icing system are determined on the basis of the thickness of the formed layer of ice.
- 30 6. Method according to claim 4, wherein the intervals between the activation of the de-icing system are determined based on the climatic conditions, ie on the basis of measurement of the wind, the temperature, the humidity and the precipitation.

7. Method according to claim 4, **characterised in that** the intervals between activation of the de-icing system are fixed.
8. Method according to one or more of the preceding claims, wherein in the leading edge area the blades have a surface structure or a surface coating providing a water- and ice-repellent surface.
9. Method according to one or more of the preceding claims, **characterised that** by using the generator as a motor the rotor is made to rotate at the same constant rotational speed.
10. Method according to one or more of the preceding claims 1-8, **characterised in that** the generator is intermittently used as a motor to make the rotor rotate at a predetermined first rpm, the generator/motor then being disconnected from the supply grid to allow the rotor to idle freely, until a predetermined second rpm is reached, the generator subsequently being used as motor, until the first predetermined rpm is reached once again.